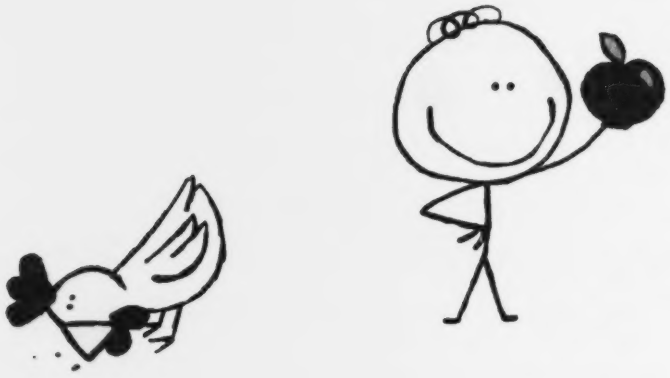
ALBERTA NUTRITION GUIDELINES FOR CHILDREN AND YOUTH — DRAFT FOR DISCUSSION



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The draft Alberta Nutrition Guidelines for Children and Youth have been commissioned by Alberta Health and Wellness and prepared by the Alberta Institute for Human Nutrition at the University of Alberta, Edmonton.

I. INTRODUCTION

The Government of Alberta is committed to promoting healthy eating and healthy weights for children and youth in Alberta. Because many meals and snacks are consumed outside the home, it is important to ensure that children and youth are able to access healthy food choices wherever they go. Many of these eating occasions will occur in the settings of childcare facilities, schools, and recreational facilities and environments. These facilities and organizations therefore have a unique opportunity to impact the eating practices and attitudes of Alberta's children and youth. The goal of the Alberta Nutrition Guidelines for Children and Youth is to equip facilities and organizations with the tools they need to provide children and youth with healthy food choices in childcare settings, schools, in recreation centres, at special events, and in the community at large.

The Alberta Nutrition Guidelines for Children and Youth will assist Albertans to create an environment which provides and promotes healthy food choices and healthy attitudes about food. As individuals, families, organizations and communities, we can work together to increase the availability and appeal of healthier food choices, and to teach and model healthy eating behaviours. On a practical level, the guidelines will help Albertans to recognize and apply the concepts of healthy nutrition in a consistent way, so that children will have access to nutritious foods wherever they go.

WHY GUIDELINES ARE IMPORTANT

Facts and Stats — Healthy Eating and Children and Youth

Healthy Eating and Children's Health

- Food choices during childhood and adolescence help to fuel optimal growth and development and lay the foundation for lifelong eating habits.
- Poor eating habits and sub-optimal nutrient intakes during the first two decades of life have been linked to an increased risk for heart disease, cancer, diabetes and other chronic diseases later in life (World Health Organization, 2002; Zemel et al., 2004; Zemel, 2005).
- Eating habits and nutritional status have also been linked to academic performance, behaviour, and self-esteem in children and youth (Walsh-Pierce and Wardle, 1997; Corbin et al., 1997; Whalley, 2004).

Healthy Eating and Brain Development/Ability to Learn

- Food choices and eating patterns influence brain development and ability to learn in children and youth (McCain, 1999).
- Optimal brain development demands consistent intakes of several nutrients including iron, vitamin B12, zinc, and omega-3 fatty acids (Hughes, 2003; Bryan, 2004).
- Eating patterns that do not provide these essential nutrients have been linked to decreased cognitive function and academic performance (Louwan et al, 2000; Whalley, 2004)

Diet Quality of Canadian Children and Youth

- An online survey of grade 6 – 9 students in Alberta found that girls did not meet the minimum number of servings for three of the four food groups (vegetables and fruit, meats and alternatives, and milk and milk products) in the Canada's Food Guide for Healthy Eating (Calengor, 2006).
- Seven to 16% of children consume more fat than the upper recommended level of 35% of calories, the threshold beyond which health risks are likely to increase (Garriguet, 2004; IOM, 2002).
- Vegetable and fruit consumption is limited among Canadian children living in the Prairie Provinces and averages only 4 servings a day, compared to the recommended minimum of 5 (Garriguet, 2004).
- Children who report consuming vegetables and fruits less than 5 times a day are more likely to be overweight or obese (Shields, 2004)
- In Canada, 61% of boys, and 83% of girls do not take in the recommended minimum of 3 servings per day of milk products. (Garriguet, 2004).
- Breakfast accounts for the fewest number of calories in the eating patterns of Canadian children and youth, which may translate into more snacking throughout the day (Garriguet, 2004).

Excessive Intakes of Foods that are High in Fat, Sugar, Salt and Calories

- Foods that are mostly sugar, or mostly fat, as well as higher fat and/or higher salt snack foods represent almost ¼ of the energy (calorie) intake of Canadian children and youth aged 4 – 18 years (Garriguet, 2004).
- Almost ½ of Albertan children report consuming high-fat, high-calorie foods on a daily basis. (Foundations for School Nutrition Initiatives in Alberta, 2006).
- ¼ of Canadian children report eating fast foods — many of which are high in fat, salt, sugar and calories — every day. (Foundations for Schools Nutrition Initiatives in Alberta, 2006).
- More than 39% of junior high students, and more than 50% of high school students report purchasing foods from vending machines and convenience stores at least once per week (Calengor, 2006; Taft and McCargar, 2004).
- High calorie, less nutritious foods and beverages, such as soft drinks have been linked to the risk for overweight in children and youth (Malik, Schulze, and Hu, 2006).
- In Alberta, obese adolescents consume significantly more foods that are mostly sugar, or mostly fat, or higher fat and/or higher salt snack foods than their normal weight peers (Calengor, 2006).

Body Weight and Health

- In 2004, more than one in four Canadian children and youth aged 2 – 17 were either overweight or obese — more than double the rate since 1973 (Health Council of Canada).
- More than one in four Alberta children and youth are overweight, which in turn has led to increasing rates of Type 2 diabetes in young people (Southern Alberta Child and Youth Health Network).

II. GUIDING PRINCIPLES

The Alberta Nutrition Guidelines for Children and Youth have been developed based on the following guiding principles:

The guidelines.....

1. Were developed in response to requests from individuals and organizations that work with children and youth for guidance to create supportive environments that enable healthy food choices.
2. Are based on current evidence of what constitutes a healthy dietary pattern for children and youth.
3. Translate nutritional science into practical food choice guidance.
4. Complement Health Canada's recommendations in *Eating Well with Canada's Food Guide*, and adopt a "total diet approach" to healthy eating.
5. Are intended to promote and achieve optimal growth, development, and overall health for children and youth.
6. Are intended to promote and achieve healthy weights for children and youth.
7. Include practical implementation strategies.
8. Reflect the ethnic and cultural diversity of Alberta's population.
9. Consider the role of the family in guiding the food choices of children and youth.
10. Encourage and support the provision of healthy food choices at all facilities and events where children and youth visit.

III. NUTRITION GUIDELINES FOR CHILDREN AND YOUTH

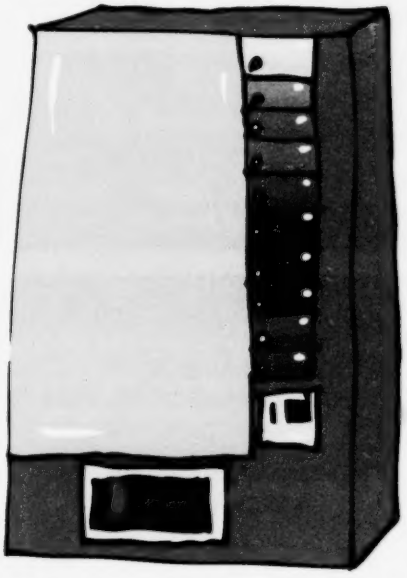
A. Healthy Eating for all Children and Youth

Children and youth have different nutritional needs than adults, and should not be considered as "little adults". Proper nutrition is especially important during childhood and adolescence to:

- Support optimal physical, cognitive, and social growth and development.
- Develop healthy eating habits now and for the future.
- Achieve and maintain healthy bodyweights.
- Reduce the risk for chronic diseases such as heart disease, cancer, osteoporosis, and type 2 diabetes.

Although the nutritional requirements of young people vary with age, sex, and level of activity, all children and youth benefit from a well balanced approach to eating. A comprehensive approach to healthy eating must consider: i) the components of a healthy diet; ii) ways to enhance access to safe, nutritious foods; and iii) ways to create environments that support healthy food choices. Parents play a significant role in this process, however personnel at childcare facilities, schools, recreational facilities and community events can all make a unique and important contribution. The Alberta Nutrition Guidelines for Children and Youth adopt a positive approach, and describe general and specific ways in which Albertans can be involved in supporting the health and well being of Alberta's children and youth.

The following general recommendations are relevant in all places where children and youth may be present.



i) Healthy diets for children and youth include:

- Nutrient-rich foods from all 4 food groups of Canada's Food Guide:*

Vegetables & Fruit

- Raw or prepared with little to no added fat, sugar, or salt.
- Eg. fresh, frozen, or canned vegetables; unsweetened fresh, frozen, or canned fruits.

Grain Products

- Whole grain choices that are lower in fat, sugar, and salt.
- Includes whole grain breads, cereals and pastas; brown rice.

Milk & Alternatives

- Lower fat (skim, 1%, 2%) milk and milk alternatives.
- Eg. fluid milk, cheeses, yogurts, calcium and vitamin D fortified soy beverages.

Meat & Alternatives

- Prepared with little or no added fat or salt.
- Eg. lean meats, fish or poultry; eggs; legumes (eg. dried beans, peas or lentils); nuts/nut butters; tofu.

*Appendix F

- Choosing a variety of foods from each food group every day.
- Choosing different kinds of foods within the food groups helps to prevent nutrient deficiencies.
- Limiting foods that are high in sugar, salt, or fat to no more than 1 to 2 servings per week.
- Enjoying regular meals and snacks.
- Water should always be available.
- Choosing appropriate portion sizes of foods, consistent with hunger and fullness.
- Serving sizes for foods that are high in fat, sugar and salt should not exceed:
  - 30 g for chips and crackers
  - 30 g for high sugar cereal
  - 20 g for beef jerky
  - 30 g for cookies and cereal bars
  - 40 g for chocolate bars and candy
  - 55 g for bakery items, including, but not limited to, pastries, muffins, and doughnuts (approximately the size of a deck of cards)
- Making nutritious foods more accessible, and limiting the availability of foods that are less nutritious.
- Ensuring food purchasers know how to read food labels to select healthy foods.

The Food Rating System

A rating system is a simple means of communicating the relative healthfulness of food options that could be made available. Facilities and organizations are encouraged to create an identification system for the following three categories:

1. "Choose Most Often" — High nutrient-rich foods that have:
   - good source of vitamins, minerals
   - at least 2 grams of fibre
   - no more than 2 grams of saturated fat per serving
   - no (0) grams of trans fats per serving
   - contain no more than 35% of their total calories from fat
   - contain no more than 35% of their total calories from sugar
   - no more than 200 mg of sodium per packaged portion

Foods in this category provide multiple nutrients in reasonable quantities; they play an important role in healthy eating and should be first choices.

These foods are primarily those represented in the four (4) rainbow arches of Canada's Food Guide.

Vegetables & Fruit	*Grain Products*	*Milk & Alternatives*	*Meat & Alternatives*
Fresh, frozen or canned (no or low salt) vegetables	Whole grain breads, bagels, cereals, tortillas	White milk (skim 1%, 2%) Fortified soy beverages (low fat)	Poultry, fish, red meat, lean deli meats
Fresh, frozen, or canned fruit (in no added sugar)	Whole grain pasta	Yogurt	Peanut/nut butters, nuts, seeds
Unsweetened fruit sauces	Brown rice	Hard cheese, cottage cheese	Beans, peas, lentils

These foods should be consumed daily.

2. "Choose sometimes" — Moderate nutrient-rich foods are foods that have fair levels of nutrients like vitamins, minerals and fibre, but they also contain:
   - more than 2 grams of saturated fat per serving
   - more than 35% of their calories from fat
   - more than 35% of their calories from sugar
   - more than 200 mg of sodium per packaged portion

Foods in this category may provide a good source of the minerals such as calcium and iron, but they may also provide more fat and sugar than is needed.

Eating too many choices from this category of foods displaces the consumption of high nutrient-rich foods.

Vegetables & Fruit	*Grain Products*	*Milk & Alternatives*	*Meat & Alternatives*
100% Vegetable or fruit juice	White breads, bagels, cereals, tortillas	Flavoured milk	Beef jerky
Canned fruit (in syrup)	White pasta	Frozen yogurt	Breaded poultry, fish, red meat
100% Fruit leather	White rice	Refrigerated pudding cups	Lean wieners, sausages

These foods could be consumed approximately two (2) to three (3) times in a week.

3. "Choose least often" — Low nutrient rich foods that contain limited nutrients and:
   - are poor choices of fibre
   - high in sugar, fat and/or salt
   - are not part of the four (4) food groups in Canada's Food Guide

Regular consumption of these foods is not recommended.

Examples are:

Potato chips, nacho chips, cheese puffs
Soft drinks, fruit drinks, iced tea, slush drinks, sports drinks
Chocolate bars, candy, marshmallows
Ice cream, milkshakes, frozen treats, candy bar flavoured milk
High sugar cereals
Cakes, cookies, granola bars with chocolate or icing
Deep fried foods
Sticky buns, donuts, pastries
Cheese spreads, gravy, whipped cream/topping, cream cheese, sour cream

These foods could be consumed once a week.

Facilities and organizations would do well to choose an identification system that is readily identifiable for children and youth to help them to consistently identify and select healthy food options. A food rating system is expected to act as a simple, inexpensive, and practical tool.

Rating of Mixed Foods

Scientists have taken a variety of approaches to the rating of mixed packaged foods. A simple example for choosing mixed foods is to compare similar mixed foods and choose the one with the:

- least amount of total fat
- ≤ two (2) grams of saturaged fat/serving
- no (0) grams trans fat
- least amount of cholesterol, sodium and sugar
- most fibre, at least two (2) grams per serving, and
- most vitamins and minerals

Reading Nutrition Facts tables will provide you with the information you need to make healthy choices. For more information on reading Nutrition Facts Labels refer to Appendix C — "Implementation Tools".

A detailed Food Rating System has been provided in Appendix A.

ii) Enhancing access to safe, nutritious foods involves:

- Providing safe food handling instruction for all individuals who prepare or serve food.
- Adhering to provincial food safety standards. These optional nutrition guidelines are intended to supplement existing mandatory provincial standards for the provision of food in public facilities.
  - The Alberta Government Public Health Act contains food handling regulations (Alberta Government, 2006).
  - The Alberta Health and Wellness Food Retail and Foodservices Code provides supplemental food handling information (Alberta Health and Wellness, 2003).
- Addressing the potential for allergies by:
  - Having ingredient lists for all foods on hand.
  - Labelling foods that contain common allergens (eg. nuts, fish).
  - Contacting your Regional Health Authority for information and assistance on maintaining an allergy aware environment.
  - Developing policies based on the latest allergy-related recommendations.

iii) Creating environments that support healthy food choices involves:

- Working together (parents, children and caregivers) to develop policies that support children and youth in making healthy food choices.
  - Adults must take the lead in defining the food choices that will be available to children at different life stages. Adults should decide what, when and where to offer food, and children should decide whether or not they will eat, and how much to eat.
  - Adults can help establish healthy eating practices by encouraging eating when hungry and stopping when full.
  - Make sure everyone is aware of food policies, including children, parents, and caregivers.
- Being a positive role model. Children adopt many of the eating habits and attitudes about food, health and body weight that they observe in the significant adults in their lives.

- Talking and teaching
  - Eating well for a lifetime requires both knowledge and skills. Talking to children and youth about the benefits of healthy eating, and teaching basic shopping, cooking, and menu planning skills lays the foundation for good health.
  - Make sure healthy foods are available to allow children and youth to practice what they have learned.
  - Coach children and youth how to differentiate internal body hunger from external influence (advertising).
- Recognizing and rewarding positive behaviours and 'champions' of healthy eating. Positive recognition reinforces the value of making healthy food choices.
- Being creative with rewards. Rewards can be non-food items such as extra free time, stickers, games, craft or athletic supplies.
- Using only healthy food items or non-food items for fundraising purposes.
- Creating calm, pleasant atmospheres that make eating enjoyable, and promote the social development of young people.
- Recognizing and celebrating that healthy bodies come in different sizes and shapes.

B. HEALTHY EATING FOR CHILDREN AND YOUTH: SPECIAL CONSIDERATIONS

Children and youth spend significant amounts of time in childcare facilities, schools, and in recreational facilities and environments. Whereas a general description of healthy eating has been provided (pages 7 – 12), this section of the guidelines is intended to supplement that information with specific and simple recommendations that organizations and facilities can implement to ensure children and youth have access to healthy food options throughout the province. These specific recommendations are supported by evidence and examples of implementation strategies. Additional resources to assist facilities and organizations in implementing the guidelines can be found in the appendices.

Change is often better accepted, and more effective when implemented in a gradual manner. By beginning with small, simple changes, the capacity of organizations to provide healthful food options has the opportunity to evolve as Albertans adapt to a changing food environment.

B.1 SPECIAL CONSIDERATIONS FOR CHILDCARE FACILITIES

In Alberta, childcare centres include daycare centres, nurseries, preschools, family day homes, out-of-school care, and drop-in centres. Some facilities provide all of the meals and snacks for the children under their care, while others require parents to provide all, or a portion of the food required. Regardless of whether or not food is provided, all childcare facilities play an important role in shaping the eating behaviours of children through the food environment they create. By ensuring access to healthy meals and snacks, and allowing children the flexibility to regulate their intake according to their own feelings of hunger and fullness, caregivers can help to foster healthy eating behaviours in the children under their care.

The following guidelines are relevant in all childcare facilities, although they may have to be modified in certain circumstances to fit the size, population, and mandate of particular facilities, such as for before and after school care. **These optional guidelines are intended to supplement existing mandatory provincial standards for the provision of food within childcare facilities.**

i) Childcare facilities can provide healthy food

What we know:

- Consumption of regular meals and snacks is essential for the proper growth and development of children.
- Children who consume regular meals and snacks, and especially breakfast, show significant improvements in academic and social development.
- Sweetened beverages are linked to obesity, tooth decay and bone problems in childhood.
- Portion sizes should be appropriate for the age of the child based on hunger and fullness.
- An evaluation of Nova Scotia daycare facilities demonstrated that menu planning training is associated with higher menu quality. The majority of respondents expressed a desire for more resources and training in this area.

Recommendations:

- Children should be provided with regular meal or snack times every 2 – 3 hours.
- Use Canada's Food Guide to ensure meals contain foods from at least 3 food groups, and snacks from 1 – 2 food groups.
- 100% of the foods available for regular consumption* should be foods with high to moderate levels of nutrients.
- Individual portion sizes and the number of servings provided should be consistent with Canada's Food Guide.

**Special events and food days are excluded from this definition*

Taking action:

- Use a planner to plan meals and snacks.
  - Develop re-usable daily/weekly/monthly menus.
  - When planning menus, consider the facilities (eg. space), staff (eg. time, skill level), and equipment (eg. ovens, stoves) required to prepare each item.
- Develop a file of healthy recipes.
- Evaluate how many servings from Canada's Food Guide each recipe provides. This will greatly simplify and speed up the process of developing menus that meet Canada's Food Guide recommendations.

- Calculate the cost to prepare each recipe. This will help to minimize and predict meal costs.
- Include recipes that consistently produce a good product.
- Serve whole fruits and vegetables for meals and snacks instead of fruit juices.
- Offer healthy beverages:
  - Serve milk (skim, 1%, 2%) or fortified soy beverages with meals, and serve water between meals.
  - When juice is served, offer only ½ to 1 cup of pure, unsweetened fruit juice per day.
  - Do not serve soft drinks, iced tea, sports drinks, fruit flavoured beverages, punches, or 'ades'.
- See Appendix C for menu planning resources.

ii) Childcare facilities can enhance access to a safe eating environment

What we know:

- The incidence of food allergies is rising. Food allergies are associated with adverse complications.

Recommendations:

- Childcare facilities should be nut-free as per provincial guidelines.
- Do not serve high risk foods such as: undercooked meat, poultry, or fish; and dairy products, juices and honey that have not been pasteurized. www.hc-sc.gc.ca
- Ensure caregivers are familiar with guidelines for supporting children with allergies.
- Ensure caregivers know how to respond when a child has an adverse food reaction.
- Ensure foods are cut into appropriately sized pieces and avoid serving foods that pose a high risk of choking.
- Provide menu planning training for staff in childcare facilities.

Taking action:

- Train caregivers to ensure that food served is safe.
- Post a list of the children with food allergies and intolerances. Update the list regularly and ensure caregivers consult the list frequently.
- To minimize costs, purchase produce in season or use canned or frozen items with no added sugar or fat.

iii) Childcare facilities can create environments that support healthy food choices

What we know:

- Parents and caregivers are the most important influence on preschooler food and beverage intake, and therefore play a large role in establishing a healthy feeding relationship with children.
- Parents and caregivers decide when, where, and what foods are offered. Children should choose whether they will eat a particular food, and the quantity they will eat.
- Children may need to be exposed to unfamiliar foods several times before they will accept them.
- Children may accept new foods more readily in a group than individually.

Recommendations:

- Provide appropriate time and space to eat.
- Create a positive meal environment by making healthy foods appealing.
- Serve foods in age appropriate portion sizes.
- Introduce new foods in small amounts, and provide multiple occasions for children to try them.
- Avoid using food as a reward or punishment.

Taking action:

- Allow 10 – 15 minutes for snacks and 20 – 30 minutes for meals.
- Make food appealing. Develop menus with a variety of food colours, shapes, flavours, textures and temperatures.
- Where possible, involve children in meal preparation.
- Post weekly menus for parents.
- Use child-sized utensils, plates and cups.
- Introduce new foods along with more familiar foods.
- Allow children to choose between several healthy food items, but do not cater to unreasonable or unhealthy demands.
- Allow children the freedom to refuse to eat certain foods.
- Serve foods that reflect the cultural and religious diversity of the children in childcare.
- Ensure appropriate substitutions are available to children with cultural or religious food restrictions.
- Caregivers eating with children helps to establish a positive meal environment and to model healthy eating behaviors.

iv) Childcare facilities can have a positive influence on the food provided by parents/guardians

What we know:

- Parents and caregivers are the most important influence on preschooler intake.

Recommendations:

- **Use Canada's Food Guide to ensure meals contain foods from at least 3 food groups, and snacks from 1 – 2 food groups.**
- **100% of the foods available for regular consumption* should be foods with high to moderate levels of nutrients.**

**Special events and food days are excluded from this definition*

Taking action:

- Post weekly menus when parents are responsible for providing a portion of the food. This information will help parents to know what types of additional foods to send with their children.
- Provide guidelines to parents so they have suggestions for what foods to send with their children.
- Childcare facilities should have a variety of healthy food options on hand in the case of unforeseen events or emergencies.

v) Before and after school care

What we know:

- Consumption of regular meals and snacks is essential for the proper growth and development of children.
- Children who consume regular meals and snacks, and especially breakfast, show significant improvements in academic and social development.
- Sweetened beverages are linked to obesity, tooth decay and bone problems in childhood.
- Serving sizes of food and drink should be based on age and hunger. Many ready-to-eat foods are too large for small appetites and may be overconsumed if offered to children.

Recommendations:

- Caregivers should provide snacks for children that include nutritious food choices from 1 – 2 food groups.
- 100% of the foods available for regular consumption* should be foods with moderate to high levels of nutrients.
- Caregivers should have additional snacks available to ensure the nutritional needs of children are met.
- Individual portion sizes should be consistent with Canada's Food Guide.

**Special events and food days are excluded from this definition*

Taking action:

- Provide or ask parents to provide healthy simple snacks such as: fresh fruits and vegetables, yogurt, cheese on half a whole grain bagel (see Appendix A for more snack suggestions).

B.2 SPECIAL CONSIDERATIONS FOR SCHOOLS

Schools can provide a consistent healthy eating message for students by ensuring access to nutritious foods, and by teaching and modeling healthy eating behaviours. Classroom nutrition education should be reinforced by making healthy food options available in school cafeterias, vending machines, stores/canteens, and at special events. Other food-related issues that arise in schools include fundraising with food, food safety, allergies, pricing, role modeling, and the meal-time environment. The following suggestions may be helpful to school administrators, teachers, and other school staff. Parents, other caregivers and/or community groups may also find some of these suggestions useful.

i) Schools can provide healthy foods

What we know:

- Healthy eating supports optimal child health, growth, and intellectual development.
- Portion sizes for many foods are unreasonably large and exceed requirements. Children and youth eat more when they are served larger portion sizes.

Recommendations:

- **Use Canada's Food Guide to ensure meals contain foods from at least 3 food groups, and snacks from 1 – 2 food groups.**
- **Individual portion sizes should be consistent with Canada's Food Guide.**
- **Stock vending machines with appropriate-sized packages/containers.**
- **Offer only small portion sizes of less healthy options (where these foods are permitted).**

Taking action:

- School food policies can be established to determine the types and amounts of foods that can be sold in the school.
- Ensure contract(s) with food and beverage suppliers specify the types and quantities of foods that can be offered in the school.
- Offer healthy food options in meal combinations (eg. salad instead of fries).
- Healthy beverage choices include water, milk (skim, 1%, 2%), fortified soy beverages, and 100% fruit/vegetable juices.

- Develop standard serving sizes that match the portion sizes in Canada's Food Guide. Ensure serving utensils match the serving sizes.
- Offer only small portion sizes of less healthy options if served during special events or food days. Examples include Halloween-sized treats, or small portion sizes of sugary beverages (≤ 200 ml).
- Develop re-usable daily/weekly/monthly menus.
- When planning menus, consider the facilities (eg. space), staff (eg. time, skill level), and equipment (eg. ovens, stoves) required to prepare each item.
- Develop a file of healthy recipes.
- Evaluate how many servings from Canada's Food Guide each recipe provides. This will greatly simplify and speed up the process of developing menus that meet Canada's Food Guide recommendations. Calculate the cost to prepare each recipe. This will help to manage and predict meal costs.

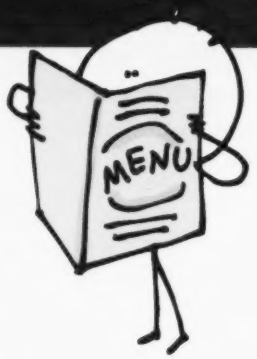
ii) Schools can enhance access to safe, nutritious foods

What we know:

- Price influences student food purchases, and is the most important concern in low-income settings.
- Schools in California found creative ways to effectively and proactively negotiate with vendors in order to comply with legislation that established nutrition standards for competitive foods sold in schools.
- Ottawa Public Health and Ventrex Vending Services demonstrated that selling healthier snacks can be profitable.
- Food availability and accessibility are important predictors of food intake in children and youth.
- Children reduce their consumption of fruit, some vegetables, and milk, and consume more sweetened beverages and high fat vegetables when they enter middle school and gain access to student snack bars.
- Moving healthy foods, such as fruits and vegetables to the start of the cafeteria line makes them more visible and more likely to be chosen.
- The incidence of severe food allergies is increasing.

Recommendations:

- Ensure that healthier food choices are competitively priced relative to less nutritious foods.
- If pricing and affordability are a challenge, affordable healthy meal choices should be a priority over affordable healthy snacks.
- All vending machines should contain a 100% of healthy food options.
- Healthy food choices should be available and clearly visible on special food days and at special functions.
- The frequency of special food days should be defined in school policies.
- Students who operate microwaves or other appliances in schools should be monitored appropriately.
- Ensure meal-time supervisors are familiar with guidelines for supporting children with allergies.
- Ensure meal-time supervisors are aware of school policies of how to respond when a child has an adverse food reaction.



Taking action:

- Identify vendors, farmers and businesses that can provide Alberta-grown produce or other healthful products at affordable prices.
- Schools can pool their resources and purchase healthy foods in bulk quantities.
- Put healthy food items on sale to encourage students to try them.
- Promote sales of only healthy food items.
- Compensate with a lower profit margin on healthier foods by using an increased profit margin on less healthy foods.
- Develop school policies to guide the types of food offered on special food days, on fieldtrips, and during class parties. Ensure healthy food options are available.
- Develop school policies about junk food brought from home.
- Emphasize and promote cleanliness at meal times.
- Ensure school policies address food allergies and special dietary concerns. The goal of these policies should be to ensure a healthy environment for all children, and to protect children with food allergies from exposure to potential allergens.
- Provide education to ensure students understand the dangers some foods may pose to the health of their classmates.

iii) Schools can create environments that support healthy food choices

What we know:

- Students should be given a minimum of 20 minutes to eat.
- If students feel they need to eat quickly, they often choose to skip lunch or purchase foods from vending machines/snack bars.
- Children eat less if they are eager to go out and play.
- Long lines in cafeterias, insufficient time to eat, cramped and unattractive cafeterias, and noise may cause students to purchase more food from vending machines or school stores.
- Increasing the variety and appeal of healthy options may encourage students to purchase them more often.
- Schools offer an ideal setting to promote healthy eating behaviors in children and adolescents.
- School nutrition policies are associated with changes in students' nutritional knowledge and behaviors.
- The food-related behaviours of students change in response to changes in the school food environment.
- Knowledge of healthy eating does not necessarily translate to better food choices.
- The nutrition education students receive in the classroom may not match the messages conveyed in other school settings.

Recommendations:

- Provide appropriate time and space to eat.
- Healthy food choices should be more plentiful and more visible than less healthy food choices.
- Place healthier food and beverage choices at eye level.
- Ensure that food choices reinforce healthy eating concepts taught in the classroom.
- Fundraising activities should be consistent with healthy eating concepts taught in the classroom.

Taking action:

- Develop school policies to address time for eating, seating availability, socializing opportunities, and additional time for play (either before or after the meal).
- Schedule lunches so that recreation time does not compete with mealtimes.
- Allow students to have water bottles at their desks to encourage them to drink more water throughout the day.
- Highlight healthier food choices with signs, stickers, and/or symbols.
- Display posters and sample plates depicting healthy meals that include foods from a minimum of 3 different food groups.

- Suggestions for fundraising:
  - Use non-food items (eg. cookbooks, day timers, raffle tickets for theme baskets, first aid kits, coupon books) or activities (eg. walk-a-thons and talent shows).
  - Use nutritious food items, in appropriate portion sizes (eg. plain popcorn, oatmeal raisin cookies, fruit smoothies).
- Use non-food items for rewards, e.g. extra gym or recess, "treasure trunk", free time at the end of class, stickers, school supplies.
- Staff, teachers, volunteers, visitors and parents can be healthy eating role models by packing healthy lunches and snacks.
- Serve healthy foods at staff social activities.

iv) Grade level of school

What we know:

- Children require different levels of support for decision making at different ages.
  - In the youngest children, good decision making is encouraged by ensuring that all available choices would be good choices.
  - As children mature, it is important that they learn how to identify and make good choices on their own. Schools seek to offer a balance between recognizing the need for young people to learn and practice good decision making, and modeling good lifestyle choices.
  - Note that the majority of foods available to students at all levels should be healthy, however older students are given the opportunity for greater independence in decision making.

Recommendations:

- In elementary schools, 100% of the foods available for regular consumption* should be foods with high to moderate levels of nutrients.
- In junior high schools, 100% of the foods available for regular consumption* should be foods with high to moderate levels of nutrients.
- In high schools, 100% of the foods available for regular consumption* should be foods with high to moderate levels of nutrients.
- Multi-level schools should adhere to the most conservative recommendation. Eg. In K – 12 schools, 100% of the foods available for regular consumption* should be foods with high to moderate levels of nutrients.

Special events and food days are excluded from this definition

v) Additional Implementation Strategies

Who to Involve:

- Schools can create their own Food and Nutrition Policy Teams that include staff, parents and students.
- Allowing students to have input into food and beverage choices may encourage greater acceptance of, and adherence to healthy food policies in schools.
- Make sure food services/stores around the school are aware that school food policies exist. Encourage them to support these policies by offering healthier food items.

Promotion:

- Teachers and student councils can work together on marketing campaigns that promote healthy food choices (eg. "Caught you eating healthy").
- Newsletters can be an effective way to communicate healthy eating campaigns.

Making Changes:

- Do not try to make too many changes at once, instead, focus on one or two changes at a time.
- Develop a transition plan to allow time for students, parents and other key stakeholders to learn about, and adapt to changes.

B.3 SPECIAL CONSIDERATIONS FOR RECREATIONAL FACILITIES AND ENVIRONMENTS

Recreational facilities and environments are highly diverse. Recreational facilities range from small community-based recreational centres to larger venues that attract thousands of spectators/participants. They may be operated on a for-profit or a not-for-profit basis. In many instances, the food services within recreational centres are subcontracted to for-profit food service operators. Most facilities serve a diverse customer base of both adults and children. Food service operators can ensure that their menus contain a balance of food items, including healthier food options at competitive prices.

Recreational environments include, but are not limited to events taking place in the community at large such as festivals, team sports, day camps, or summer camps.

i) Recreational facilities and environments can provide healthy foods

What we know:

- Portion sizes for many foods exceed the serving sizes found in Canada's Food Guide.
- Foods that are not part of Canada's Food Guide are often high in sugar, fat, and/or salt, and low in fibre and other important nutrients. These foods are commonly served in very large portion sizes.
- Children eat more food when they are served larger portion sizes.

Recommendations:

- Fruits and vegetables (raw, or prepared with little to no added fat, sugar or salt) should always be available.
- Water should always be available. Milk (skim, 1%, 2%) and 100% fruit/vegetable juices should also be available.
- Individual portion sizes should be consistent with Canada's Food Guide.
- Serving sizes for foods that are not in Canada's Food Guide should not exceed:
  - 30 g for chips and crackers
  - 30 g for high sugar cereal (¾ to 1 cup)
  - 20 g for beef jerky
  - 30 g for cookies (2) and cereal bars (1)
  - 20 g for chocolate bars and candy (1 mini)
  - 55 g for bakery items, including, but not limited to, pastries, muffins, and doughnuts (approximately the size of a deck of cards)
  - 85 mL for frozen desserts, including, but not limited to, ice cream (frozen on a stick)
  - 355 mL for beverages (12 oz)

Taking action:

- Ensure beverages such as water (plain, sparkling, flavored), milk, and 100% fruit/vegetable juices are always available.
- Offer only small portion sizes of less healthy options, such as single serving sizes, or small cans of pop, sport drinks, etc..
- As new food service contracts are signed, ensure food service operators will include healthy food items on their menus.

ii) Recreational facilities and environments can enhance access to safe, nutritious foods

What we know:

- Food availability and accessibility are important predictors of food intake in children and youth.
- Ottawa Public Health and Ventrex Vending Services demonstrated that selling healthier snacks can be profitable.

Recommendations:

- Ensure that healthier food choices are competitively priced relative to less nutritious foods.
- All vending machines should contain healthy food options.

Taking action:

- Include healthy options in all vending machines.
- Install vending machines that offer only healthy food choices, especially in high-traffic locations.
- Place healthy food options at eye level.
- Display healthier foods alongside foods of similar types (eg. whole grain cereal bars next to chocolate bars, milk next to soft drinks).
- Display healthier food choices more prominently than less healthy food choices (eg. milk displayed at eye level, soft drinks adjacent but just below).
- Do not charge a premium for healthier food options. A lower profit margin on healthier foods can be compensated for by an increased profit margin on less healthy foods.
- Put healthy food items on sale to encourage children and youth to try them (e.g. half the price of unhealthy food choice).

iii) Recreational facilities and environments can create environments that support healthy food choices

What we know:

- A survey of arena patrons conducted in Ontario revealed that:
  - Over 90% of participants would like to have healthier options available for purchase in the arenas.
  - Convenience, cost and freshness were the 3 most important determinants of food purchases.

Recommendation:

- Healthier food options should be fresh, convenient, attractively packaged, and prominently displayed.

Taking action:

- Package healthy foods attractively.
- Advertise the nutritional value of healthier food items.
- Establish an identifiable rating system to showcase nutrient-rich foods.
- As perishable items will require frequent monitoring to ensure freshness and safety, set up a tracking system for these foods.

iv) Healthier food options for recreational facilities

1. **Beverages:**
   - Milk: skim, 1%, and 2%
   - Fortified soy beverages
   - Water: plain, sparkling, flavoured
   - Juice: 100% real fruit/vegetable juices
   - Soft drinks: diet
2. **Vegetables & Fruit:**
   - Fresh fruit
   - Smoothies with frozen fruit
   - Vegetables with or without "light" dips
   - Baked veggie wedges
   - Tomato salsa as a dip
3. **Grain Products:**
   - Whole grain, low fat crackers (with or without cheese)
   - Pretzels
   - Whole grain cereal bars
   - Puffed or baked snack chips
   - Whole grain/corn snacks
   - Whole grain bagels, muffins, breads, cereals
   - Baked whole grain pita bread 'chips' with salsa dip

4. **Milk & Alternatives**

- Milk: skim, 1%, and 2%
- Fortified soy beverages
- Fresh and frozen yogurt
- Cheese sticks
- Cheese with whole grain, low fat crackers

5. **Meat & Alternatives**

- Trail mix
- Nuts, soy nuts
- Beef jerky
- Ready to eat canned tuna

6. **Mixed Meals**

- Sushi
- Whole wheat burritos and wraps with lean meats and vegetables
- Rice bowls with lean meats and vegetables
- Sandwiches on whole grain breads

v) Recreational environments

- Coaches play a key role in influencing the food choices and eating habits of children and youth. Coaches should therefore have a practical, working knowledge of general and sports-specific nutrition.
  - Coaches are encouraged to take advantage of existing programs that provide nutrition instruction, such as those offered by the Sport Medicine Council of Alberta and/or the National Coaching Certification Program (NCCP).
  - The general and school nutrition guidelines contained in this document are very relevant for coaches. Healthy snack suggestions can also be found in Appendix A.
- Day camps and summer camps should follow the guidelines provided for childcare centres and/or schools, depending upon the age of the campers. Caregivers should be trained to ensure they are able to provide appropriate healthy food choices for children and youth and to model healthy eating behaviours.

APPENDICIES

APPENDIX A: THE FOOD RATING SYSTEM

This section provides guidance and examples of how to rank foods commonly consumed by children and youth. This guidance relates to the overall food intake of children and youth in all life settings. Foods have been arranged into three (3) categories:

1. "Choose Most Often" — High Nutrient-rich foods
2. "Choose Sometimes" — Moderate Nutrient-rich foods
3. "Choose Least Often" — Low Nutrient-rich foods

Children and youth should eat a variety of foods, and they should obtain most of their calories from foods in the "Choose Most Often" category. Foods in the "Choose Least Often" category should be consumed less frequently, about once a week, and in small portion sizes. In many instances, caregivers may have to exercise their own best judgment by reading food labels to determine the appropriate frequency and portion sizes for different foods. The Food Rating System has included, when available, both reference amount serving sizes[1] and Canada Food Guide serving sizes. Information to assist caregivers in reading nutrition labels has been provided in Appendix C.

It is important to keep in mind that although the quantity of fat in foods (i.e. no fat, low fat) is a key consideration in assessing what is "healthy", the type or quality of fat in food is also an important criterion in rating foods. A balanced approach involves avoidance of trans fats (unless naturally occurring), limiting saturated fat intake, and increased reliance on mono-unsaturated and poly-unsaturated fats such as olive, canola, and flaxseed oils, etc.

Please note that the following ranking system could contain many more foods that are not listed here. The information gathered during stakeholder consultations will provide us with the information that will best suit your needs. We are encouraging all Albertans to provide feedback.

Beverages

The Alberta Nutrition Guidelines for Children and Youth are encouraging facilities and organizations to consider the following guidelines when choosing beverages:

1. Eliminate the sale of all non-dairy based beverages, excluding fortified soy beverage, that contain added sugars.[2]
2. Offer only caffeine free beverages.
3. Eliminate the sale of all sports drinks in school settings except when provided by the school's coach to student athletes participating in sports programs involving vigorous activity of more than one (1) hours duration.[2]
4. Eliminate the sale of all plain or flavoured bottled water, except in circumstances where the local water is unsafe to drink.[2] Children and youth should not have to pay for water to quench thirst. Encourage children and youth to carry a refillable water container that allows for proper cleaning on a daily basis.
5. Limit the sale of non-nutritive sweetened beverages to high school students only. The safety of long term use of non-nutritive sweeteners in children has not been assessed.[2]
6. Classify non-nutritive sweetened, non-caffeinated, non-fortified beverages, with less than 5 kcal per serving as packaged, to the "Choose Sometimes" — Moderate Nutrient-Rich category.[2]

Alberta Nutrition Guidelines for Children and Youth

Food Rating System

Unless otherwise noted in the Reference Amount column, the reference amounts are for the ready-to-serve or almost ready-to-serve form of the product.

Product	*Reference Amount*[1]	*CFG Serving*	*Choose Most Often – X*	*Choose Sometimes – X*	*Choose Least Often – X*
GRAIN PRODUCTS	Per serving				
Bread	25 g	1 slice 35 g	Whole grain	60% whole wheat	White/refined
Bagel, tea biscuits, scones, rolls, buns, croissants, tortillas/wrap, soft bread sticks, soft pretzels, corn bread	50 g	½ bagel 45 g	Whole grain	Scones Tea biscuits	Croissants
Cookies, with or without coating or filling; graham wafers	30 g		Whole grain, e.g. oatmeal	White refined flours; e.g. sugar cookies	Cookies with coating/icing fillings
Waffles	75 g				
Grain-based bars with out without filling or coating; breakfast bars; granola bar	30 g		Whole grain granola/ breakfast bar	Grain based bars with or without filling	Bars with coating, chocolate chips, marshmallows
Rice cakes	15 g				
Pizza Crust (individual)	55 g				
Taco Shell, hard	30 g				
Breakfast cereals (hot), e.g., oatmeal, Red River®, Cream of Wheat®, plain or flavored and/or sweetened	40 g dry, 250 mL prepared	175 ml prepared ¾ cup	Plain	flavoured	Sweetened
Breakfast cereals, ready-to-eat; puffed/coated, flaked, extruded, cereals without fruit/nut blend (20 g or more but less than 43 g per 250 mL), high fibre cereals containing 28 g or more fibre per 100 g	30 g	30 g ¾ cup	Whole grain		Sugar Sweetened Cereals ≥ 8 g sugar/ serving
Breakfast cereals, ready-to-eat: fruit and nut type cereals, granola cereals (weighing 43 g or more per 250 mL), biscuit type cereals	55 g				

Product	*Reference Amount*	*CFG Serving*	*Choose Most Often – X*	*Choose Sometimes – X*	*Choose Least Often – X*
Grains, e.g., rice, barley	45 g dry 140 g cooked	125 ml/ ½ cup cooked	Brown Rice	White Rice	
Pastas, without sauce	85 g dry 215 g cooked	125 ml/ ½ cup cooked	Whole Grain	Refined Grain	
VEGETABLES AND FRUIT					
Vegetables					
Vegetables without sauce: fresh, canned [If packed or canned in liquid, the reference amount and serving size are for the drained solids except for products in which both the solids and liquids are customarily consumed.] or frozen	85 g	125 ml / ½ cup			
Vegetable juice or vegetable drink	250 ml	125 ml/ ½ cup			
French fries, hash browns, skins, or pancake	85 g frozen French fries 70 g prepared		Baked 10-15 fries ≤ 2 g sat fat/ serving 0 g trans fat		Deep fried
Fruit					
Dried fruit, e.g., raisins, dates, figs, fruit leathers, etc	40 g	60 ml / ¼ cup		X	coated
Watermelon, cantaloup, honeydew and other melons	150 g		X		
All other fruits (except those listed as separate categories), fresh, canned or frozen	140 g	125 ml / ½ cup	X		
Juice, nectar, 100%	250 ml	½ cup	½ cup ≤ elementary school 1 cup ≤ middle school and high school	X	

Product	*Reference Amount*[1]	*CFG Serving*	*Choose Most Often – X*	*Choose Sometimes – X*	*Choose Least Often – X*
MILK AND ALTERNATIVES					
Cheese, cottage	125 g		X		
Cheese, grated hard, e.g., Parmesan, Romano	15 g				
Cheese, all others except those listed as separate categories, e.g., cream cheese and cheese spread	30 g	50 g (1 ½ oz)	X		
Milk, buttermilk, and milk-based drinks, e.g., chocolate milk	250 ml	250 ml	Plain white skim, 1% or 2%	Flavoured milks e.g. chocolate	Chocolate-bar type beverages
Soy Beverage - Fortified		250 ml	Plain	flavoured	
Shakes or shake substitutes, e.g., dairy shake mix, fruit frost mix	250 ml				
Yogurt	175 g	175 ml / ¾ cup	Plain or real fruit	Artificial fruit fl	≥ 8 g sugar/serv
Ice cream, ice milk, frozen yogurt, sherbet	125 ml				X
Dairy frozen desserts, novelties: e.g., bars, sandwiches, cones	85 g				X
Non-dairy frozen desserts: e.g., flavored and sweetened ice and pops, frozen fruit juices bars, cups)	85 g				X
Pudding - prepared	125 ml				X
MEAT AND ALTERNATIVES					
Beef-Pork-Chicken-Turkey, etc.					
Patties, burgers,	100 g raw 55 g cooked	75 g (2 ½ oz) 125 ml/ ½ cup	Broiled/baked		fried
Luncheon meat	75 g uncooked 55 g cooked		Lean		Regular salami, pepperoni or sausage types
Cuts of meat, poultry or game (without sauce), ready-to-cook cuts including marinated and tenderized	125 g raw 100 g cooked	75 g (2 ½ oz) 125 ml/ ½ cup			
Canned meats, beef, pork, canned poultry	55 g		Lean		

Product	*Reference Amount*	*CFG Serving*	*Choose Most Often – X*	*Choose Sometimes – X*	*Choose Least Often – X*
Fish					
Entrées (without sauce), e.g., plain or fried fish or shellfish (battered, coated), fish and shellfish cakes	125 g raw 100 g cooked		baked fish and shellfish		battered, coated, fried fish or shellfish cakes
Fish and shellfish, canned [If packed or canned in liquid, the reference amount and serving size are for the drained solids except for products in which both the solids and liquids are customarily consumed.]	55 g	75 g (2 ½ oz) 125 ml/ ½ cup	Packed in water – "light" tuna	Packed in oil "light" tuna	
Nuts					
Nuts, seeds and mixtures, all types: sliced, chopped, slivered, and whole	30 g	60 ml/ ¼ cup	Plain, unsalted	salted	coated
Peanut butter	15 g	30 ml/2 tbsp			
Eggs	50 g	2 eggs	Poached, hardboiled, scrambled		fried
Legumes					
Bean cake (tofu) [If packed or canned in liquid, the reference amount and serving size are for the drained solids except for products in which both the solids and liquids are customarily consumed.]), tempeh	85 g	150 g or 175 ml/ ¾ cup	plain		deep fried
Beans, plain (beans in sauce: see mixed dishes measurable with a cup) [If packed or canned in liquid, the reference amount and serving size are for the drained solids except for products in which both the solids and liquids are customarily consumed.]	<100g dry, 200 g cooked or canned	175 ml / ¾ cup cooked	Baked or boiled		fried
Mixed Dishes					
Measurable with cup, e.g., casserole, macaroni and cheese, pot pie, spaghetti with sauce, stir fry, meat or poultry casserole, macaroni and cheese with meat, baked or refried beans, beans and weiners, meat chili, chili with beans, creamed chipped beef, beef or poultry ravioli in sauce, beef stroganoff, poultry à la king, Brunswick stew, goulash, stew, ragout, meatballs	250 ml	250 ml/ 1 cup	≤ 2 g sat fat 0 g trans fat ≤ 8 g added sugar ≥ 2 g fibre		

Product	Reference Amount	CFG Serving	Choose Most Often – X	Choose Sometimes – X	Choose Least Often – X
Not measurable with cup, e.g., burrito, egg roll, enchilada, pizza, pizza roll, sausage rolls, pastry rolls, cabbage rolls, quiche, all types of sandwiches, cracker and meat or poultry lunch-type packages, gyro, burgers on a bun, frank on a bun, calzone, taco, pockets stuffed with meat, lasagna, stuffed vegetables with meat or poultry, shish kabobs, empanada, fajitas, souvlaki, meat pie, tourtière	140 g add 55 g for gravy or sauce				deep fried
Side dishes: beans, pasta, rice, potatoes and sauce	125 g	125 ml /½ cup	Baked or boiled		fried
Salads					
Pasta or potato salad	140 g			X	
All other salad, e.g., egg, fish, shellfish, bean, fruit, or vegetable salad, with meat or ham salad, poultry salads, chicken salad, turkey salad	100 g	Leafy salad 250 ml/1 cup			
Sauces					
Barbecue sauce, hollandaise sauce, tartar sauce, other sauces for dipping (e.g., mustard sauce, sweet and sour sauce), all dips (e.g., bean dips, dairy-based dips, salsa)	30 ml			X	
Major main entrée sauce, e.g., spaghetti sauce	125 ml		low salt, low fat		
Minor main entrée sauce (e.g., pizza sauce, pesto sauce), other sauces used as toppings (e.g., gravy, white sauce, cheese sauce), cocktail sauce	60 ml			low salt	
Major condiments, e.g., catsup, steak sauce, soy sauce, vinegar, teriyaki sauce, marinades	15 ml			X	
Minor condiments, e.g., horseradish, hot sauce, mustard, worcestershire sauce, etc.	5 ml		X		
Relish, all types	15 g			X	
Snacks					
All varieties, chips, pretzels, popcorns, extruded snacks, fruit-based snacks (e.g., fruit chips), grain-based snack mixes	30 g		Baked, whole grain based snacks	pretzels	Potato chips

Product	*Reference Amount*[1]	*CFG Serving*	*Choose Most Often — X*	*Choose Sometimes — X*	*Choose Least Often — X*
Meat snack food sticks, poultry snack food sticks	20 g			X	
Sugars and Sweets					
Hard candies	15 g				X
All other candies, (including chocolate bars and other chocolate products)	40 g				X
Jams, jellies, fruit butter	15 g				X
Sugar (granulated)	4 g				X
Syrups – as a topping	60 mL				X
Cocoa, hot chocolate mixes	15 g dry or amount to make 175 mL prepared				X
Beverages — refer to page 33 for specific recommendations					
Milk (skim, 1%, 2%)	250 ml	250 ml	X		
Fortified soy beverage		250 ml	X		
100% Juice, fruit or vegetable	250 ml	125 ml		X	
Soft drinks, iced tea, fruit flavoured beverages, punches or 'ades'					X
sports drinks					coaches supervision only
water — tap			X		
Fats and Oils					
Butter, margarine, shortening, lard	10 g				
Vegetable oil	10 ml				
Dressings for salad	30 ml				
Mayonnaise, sandwich spread, mayonnaise-type dressing	15 ml				

Examples of Healthy Snacks

Use the serving sizes specified in Canada's Food Guide

Choose Often	Choose Sometimes
• Pita wedges with hummus • Zucchini strips sprinkled with parmesan cheese • Tuna with 1 tbsp mayonnaise on ½ whole wheat bagel • Yogurt with fresh fruit slices • Whole grain toast with melted cheese • Rolled oats with cinnamon and raisins* • Whole wheat tortilla with beans and salsa • Raw vegetables (eg. carrots, broccoli, cauliflower, peppers, mushrooms, turnips, cucumbers) with vegetable dip • Cottage cheese with fresh pear • Fruit chunks (eg. banana, mango, pineapple) with yogurt dip • Apple slices sprinkled with cinnamon • Grated carrots with raisins* and glass of milk • Toasted whole wheat bagel with peanut butter and banana slices • Black beans/lentils served with brown rice and seasoned with 1 tbsp chutney • Cantaloupe and ½ raisin* bran muffin • Small baked potato with grated cheese • Cooked green beans with sesame seeds* and glass of milk • Hard boiled egg on ½ whole wheat English muffin • Whole grain cereal with milk and banana slices • Fruit smoothie (frozen berries blended with 1 cup of milk)	• Pancake topped with applesauce • Milk-based puddings, homemade • Canned fruit • Granola cereal (low fat) with yogurt • Homemade pizza bun (topped with ham, cheese, tomato, mushroom, pineapple) • Graham crackers with marble cheese • Homemade banana bread with glass of milk • Frozen yogurt with fruit slices • Apple and cabbage coleslaw and glass of chocolate milk • Oatmeal cookie with glass of milk • Plain granola bar with glass of 100% orange juice • 100% Fruit leather

**Caution: These foods can cause choking in children under 4 years of age (Healthy U Alberta. Healthy Eating and Active Living For your 1 to 5 year old, 2006):*

- *Popcorn, nuts, seeds, raisins*
- *Fish with bones*
- *Snacks using skewers or toothpicks*
- *Solid foods that are hard, small, and round, and smooth or sticky such as candies and cough drops*

APPENDIX B: GUIDELINES FOR POLICY DEVELOPMENT

The Alberta Nutrition Guidelines for Children and Youth contain best practices which may not all be achievable at once. It is recommended that groups use these guidelines to develop their own nutrition policies that integrate healthy eating into the framework of their organization. To develop a nutrition policy, follow these 5 steps:

Step 1 — Form a "Nutrition Action Committee"

Include representatives from all groups who will be affected by proposed changes. Look for champions — people who will be interested and excited about creating a healthier environment. Consider including the following individuals on your committee:

- Parents
- Children and youth
- School/daycare/recreation centre administrators
- Teachers
- Daycare providers
- Food service providers and vendors
- Community dietitians
- Health promotion/wellness co-ordinators

Step 2 — Discuss the purpose and goals of your policy

Reflect on your priorities and capacity for change. Create your own vision statement. Consider the following questions:

- Why are nutrition policies important to our group?
- How will nutrition policies impact our environment?
- What are our goals?
- Where are we now? Where do we want to be?
- How much time, money, people and material will the change require?
- Will the change fit with our values and culture?
- How easy will the change be?
- How much risk does the change involve?
- Can the change be broken down to easy, manageable steps?
- What will determine our success?

Step 3 — Write your nutrition policy

The nutrition policies that you formulate should reflect the most important concerns of your group. Some of the issues you might want to address include:

- Definition of a healthy food
- Variety
- Portion sizes
- Availability of, and access to safe, nutritious foods
- Supportive environments
- Adult modeling of healthy eating
- Vending machines
- Pricing
- Visibility and attractiveness of healthy foods
- Food safety
- Fundraising

Step 4 — Develop a transition plan

It is important to allow enough time for children, youth, parents, and other stakeholders to adapt to changes. Stakeholders also need time to work with vendors on product changes, or to honour existing contracts. It is usually easiest to begin with small, simple initiatives, and gradually introduce larger changes.

Step 5 — Monitor and evaluate the change.

It is important to see if your efforts are making a difference. Monitoring what works and what does not, will help you to improve your policies over time. Always make sure that someone is responsible for monitoring policy.

Questions for Children and Youth

- Are you aware of the nutrition policies?
- If you could change one thing about the food, what would it be?
- When you eat here, how do you feel about the choices you have made?
- If you could make one change to the nutrition policies, what would it be?

Questions for Staff

- Are you aware of the nutrition policies?
- Have you noticed any changes in the behaviours of the children and youth since the policies were implemented?
- When you eat here, how do you feel about the choices you have made?
- If you could make one change to the nutrition policies, what would it be?

Questions for Parents

- Are you aware of the nutrition policies?
- Do you allow your child to buy more food here because the choices are nutritious?
- Have you noticed any changes in your child's food habits since the nutrition policies were implemented?
- Would you like any parts of the nutrition policies changed?
- Do you feel more improvements could be made to the food sold or provided?

Note: Groups may also want to follow this process to develop policies on other food-related issues such as managing allergies, chronic disease, food safety, etc.

Example — School Food Policy

The following pages contain an example of a school food policy that was developed in 2003 and implemented by the Holy Family Catholic Regional Division No. 37, and adopted 11-12-03. You will note that the criteria that was used to classify foods into categories varies from what the Alberta Nutrition Guidelines for Children and Youth are suggesting. It is important for all facilities and organizations to recognize that the policies that you may develop will be unique to your situations.

Holy Family Catholic Regional Division No. 37 has advised that they are currently revising their guidelines and will be taking into consideration the recommendations outlined in the Alberta Nutrition Guidelines for Children and Youth.

Holy Family Catholic — Regional Division No. 37
Education Policies Manual

Code: D-1190 *Page:* 1 of 2
Category: **NUTRITION**
Legal Reference: *Amended:*
Adopted: 11-12-03 *Resolution #:* 64-11-03

Background

The Board of Trustees recognizes that healthy eating is an integral part of growth and development. An increasing amount of research draws connections between student health and potential for learning. Additionally, children learn from role models. Therefore, the Board is concerned about creating supportive school environments for good nutrition and lifelong well-being by encouraging healthy eating for all students and staff.

Policy

The Board of Trustees believes that the development of healthful eating habits is achieved through education in a health-promoting environment. The policy is intended to set guidelines for schools to implement a coordinated comprehensive food and nutrition policy that encourages all students and staff to develop good eating habits by promoting the consumption of nutritious and dentally acceptable foods, and controlling the sale and use of non-nutritious foods.

Guidelines And Procedures

1. Each school council will monitor the implementation and maintenance of the nutrition policy on an annual basis.

2. By the end of the 2003 – 2004 school year, all beverage vending machines in all division schools will have 50% product in the form of 100% unsweetened fruit juice and/or vegetable juices and/or water and/or milk. By the end of 2004 – 2005 school year 100% of the product will be unsweetened fruit and/or vegetable juice, and/or water and/or milk.

3. By the end of the 2003 – 2004 school year, all food product vending machines in all division schools will have 50% product chosen from the "Choose and Serve Most Often" list and 50% product chosen from the "Serve Sometimes" list (see Appendices 1 and 2).

Holy Family Catholic — Regional Division No. 37
Education Policies Manual

Code: D-1190 *Page:* 2 of 2
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Legal Reference: *Amended:*
Adopted: 11-12-03 *Resolution #:* 64-11-03

4. Schools that choose to operate a canteen will always offer items from the "Choose and Serve Most Often" list (Appendix 1) and may offer foods from the "Serve Sometimes" list (Appendix 2), and limit the sale of foods from the "Other" (Appendix 2) category to once a week.
5. Schools that choose to operate a cafeteria shall incorporate the principles outlined in Canada's Food Guide to Healthy Eating (1992) and Canada's Guidelines for Healthy Eating (1991).
6. All schools in the Division will be limited to only one major food-related fundraising activity which may include items from the "Other" list (Appendix 2). All other food-related fundraising activities will only include items from the "Choose and Serve Most Often" list (Appendix 1).
7. All division schools are encouraged to limit the use of food rewards.
8. All division schools' special events (sports events, class parties, field trips, etc.) will incorporate the principles outlined in Canada's Food Guide to Healthy Eating (1992) and Canada's Guidelines for Healthy Eating (1991).
9. The beverage consumed by students during instructional time will be water or other healthy choices as allowed by individual school policy.
10. Division staff shall model healthy food and beverage choices during instructional time.
11. The school level administrator shall develop guidelines and procedures pertaining to snack and meal programs offered at the school in line with Canada's Food Guide to Healthy Eating (1992) and Canada's Guidelines for Healthy Eating (1991).
12. The school level administrator shall develop guidelines and procedures pertaining to food allergies and with reference to Policy D-1120 Student Illnesses/Administering of Medication.
13. This policy does not impact on lunches, snacks, etc. that students or staff members are bringing from home.

Appendix 1

"Choose And Serve Most Often" List

Most of these foods are good sources of one or more of the nutrients iron, calcium, Vitamin A, C, or D and are generally low in fat, sugar and salt.

Grain Products	Bread, rolls, buns, bagels, pita bread, English muffins, waffles, pancakes, muffins, rice cakes, graham crackers, pasta, unsweetened or low sugar breakfast cereals, pretzels, popcorn (light), bannock, crackers, tortillas, taco shells, rice.
Fruits and Vegetables	Fresh fruit, fresh vegetables, caned fruits prepared in own juice, 100% fruit juice and nectars, vegetable juices, dried fruit, fruit leather, raisin boxes, frozen fruit juice bars (100% real fruit juice), fruit or vegetable salads, vegetable soup.
Milk Products	2% and 1% white or chocolate milk, yogurt, cheese slices, cheese sticks, milk-based puddings, individual cheese portions, milk-based soups.
Meat and Alternatives	Canned fish, lean meat, fish, poultry, cheese and cracker packages, peanut butter and cracker packages, cheese and cracker/breadsticks packages, wild meat (moose, deer, etc.), beef jerky, peanut butter, eggs, legumes, nuts, seeds.
Sauces, Toppings, Garnishes and Dips	Syrup, honey, jam, salsa, tomato sauce, low or non-fat dressings, spreads, mayonnaise, dips.
Sweets	Fruit bars (apple, raspberry, fig), graham crackers, cereal bars (multi-grain, low fat).

Appendix 2

"Serve Sometimes"

Most of these foods are good sources of one or more of the nutrients iron, calcium, Vitamins A, C, or D but are also high in fat, sugar or salt. If serving these foods combine with foods from "Choose and Serve Most Often" list.

Grain Products	Cookies (made with oatmeal, peanut butter, or dried fruit), granola bars.
Fruits and Vegetables	French fries, fruit in light syrup.
Milk Products	Yogurt drinks, ice cream, frozen ice cream treats, eggnog, milkshakes.
Meat and Alternatives	Wieners, sausages, cold cuts, luncheon meats, pepperoni sticks, pizza pops, pizza, sesame bars, processed cheese spread.

"Other"

(Maximum of one item per week.)

Most of these foods are considered poor sources of one or more of the nutrients iron, calcium, Vitamins A, C, or D and are also high in fat, sugar or salt.

Pastry danishes, doughnuts, cake, sticky buns, chips, cheese puffs (cheezies), candy, chocolate, flavored gelatin (jell-o), flavored fruit drinks/slushies, hot chocolate, froze ice pops, frozen ice cream treats, packaged instant soups, noodle soup, chocolate-covered granola bars, crispy rice squares, pre-sweetened breakfast cereals, pop, sport drinks, coffee/tea.

* Implementation Guild will include Canada's Food Guide to Healthy Eating (1992) and Canada's Guidelines for Healthy Eating (1991) as well as fundraising ideas and contacts.

APPENDIX C: IMPLEMENTATION TOOLS

Understanding Food Labels[1]

How can you use nutrition information on labels to make healthy choices for children and youth?

Reading nutrition information can help identify foods that contain healthy fats, small amounts of sodium (salt) and sugar, and at least 2 grams of fibre. Nutrition information can be found in three places: Nutrition Facts table; ingredient list; and nutrition claims.

Nutrition Facts table is found on packaged foods. It provides nutrition information on total calories and 13 core nutrients based on the serving size.

1. **Serving Size** is the amount of food that the nutrition information is based on. In this example, one serving of this food is 1 cup (55 g). Eating this amount will provide the amount of nutrients listed in the table.

2. **'Fat'** tells how much total fat, saturated and trans fat is in one serving. 'Cholesterol' tells how much cholesterol is in one serving. One serving of this food provides 2 grams of total fat and no saturated, trans fat or cholesterol.

3. **% Daily Value (%DV)** puts nutrients on a scale from 0% to 100%. This tells if one serving is high or low in a nutrient.

- A food that has a % DV of 5% or less for fat, sodium or cholesterol would be low in these Nutrients.
- A food that has a % DV of 20% or more for fat, sodium or cholesterol would be high in these nutrients.
- A food that has a % DV of 10% or less for saturated and trans fat would be low in these nutrients.

In this example, one serving provides little fat — only 3% and no (0%) saturated or trans fat.

Ingredient lists tells you what ingredients are in a packaged food, listed from most to least. To choose foods low in fat look for foods that list the fat near the end of the ingredient list. To choose foods that have no trans fats, avoid foods that list "hydrogenated", "partially hydrogenated", or "shortening" in the ingredients list.

For more information on label reading, refer to:

www.hc-sc.gc.ca/fn-an/label-etiquet/index_e.html or www.healthyeatingisinstore.ca

Nutrition Facts

Per 1 cup (55 g)

Amount	% Daily Value
Calories 220	
Fat 2 g	**3 %**
Saturated 0 g + Trans 0 g	**0 %**
Cholesterol 0 mg	
Sodium 270 mg	**11 %**
Carbohydrate 44 g	**15 %**
Fibre 8 g	**32 %**
Sugars 16 g	
Protein 6 g	

Vitamin A	0 %	Vitamin C	0 %
Calcium	4 %	Iron	40 %

What's in the food you're serving? Tips for Making Sense of Food Labels[2]

Which pudding is a healthier choice?

Product A

Nutrition Facts — Pudding cup

Per 1 cup (99 g)

Amount	% Daily Value
Calories 100	
Fat 1.0 g	**2 %**
Saturated 1 g + Trans 0 g	**5 %**
Cholesterol 0 mg	**0 %**
Sodium 95 mg	**4 %**
Carbohydrate 23 g	**8 %**
Fibre 1 g	**4 %**
Sugars 18 g	
Protein 1 g	

Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %		

or

Product B

Nutrition Facts — Pudding cup

Per 1 cup (99 g)

Amount	% Daily Value
Calories 110	
Fat 2 g	**3 %**
Saturated 1 g + Trans 0.5 g	**8 %**
Cholesterol 0 mg	
Sodium 115 mg	**5 %**
Carbohydrate 22 g	**7 %**
Fibre 0 g	**0 %**
Sugars 16 g	
Protein 2 g	

Vitamin A	0 %	Vitamin C	0 %
Calcium	10 %		

Product C

Nutrition Facts — Yogurt

Per 1 cup (100 g)

Amount	% Daily Value
Calories 100	
Fat 2 g	**3 %**
Saturated 1.5 g + Trans 0 g	**7 %**
Cholesterol 10 mg	**3 %**
Sodium 65 mg	**5 %**
Carbohydrate 15 g	**5 %**
Fibre 0 g	**0 %**
Sugars 14 g	
Protein 5 g	

Vitamin A	2 %	Vitamin C	0 %
Calcium	15 %	Iron	2 %
Vitamin D	0 %	Vitamin B2	10 %
Vitamin B12	15 %	Phophorus	10 %
Magnesium	6 %		

Answer

Product B would be a better pick than **Product A**. **Pudding B** offer **10% of your Daily Value for Calcium**. Use the **% Daily Value** to see if a food has a little or lot of a nutrient. **15% Daily Value** or more for calcium is a high source. Then compare the pudding cup to a yogurt cup. Yogurt offers **15% Daily Value for Calcium** in addition to B vitamins, phosphorus and magnesium.

What's in the food you're serving? Tips for Making Sense of Food Labels[2]

Which one is a candy bar and which one is a granola bar?

Product A

Nutrition Facts
Per 1 bar (23 g)

Amount	% Daily Value
Calories 90	
Fat 1.5 g	**2 %**
Saturated 1 g + Trans 0 g	**5 %**
Cholesterol 0 mg	**0 %**
Sodium 95 mg	**4 %**
Carbohydrate 18 g	**6 %**
Fibre 0 g	**0 %**
Sugars 9 g	
Sorbitol 0 g	
Starch 9 g	
Protein 1 g	

Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	2 %
Thiamin	10 %	Riboflavin	10 %

or

Product B

Nutrition Facts
Per 1 bar (34 g)

Amount	% Daily Value
Calories 160	
Fat 6 g	**10 %**
Saturated 3.5 g + Trans 0.1 g	**17 %**
Cholesterol 0 mg	**3 %**
Sodium 85 mg	**8 %**
Carbohydrate 24 g	**3 %**
Fibre 1 g	
Sugars 16 g	
Sugar Alchohol 0 g	
Protein 2 g	

Vitamin A	0 %	Vitamin C	0 %
Calcium	2 %	Iron	2 %

Product C

Nutrition Facts
Per 1 bar (30 g)

Amount	% Daily Value
Calories 140	
Fat 4 g	**6 %**
Saturated 2.5 g + Trans 0 g	**13 %**
Cholesterol 5 mg	**1 %**
Sodium 15 mg	**1 %**
Carbohydrate 24 g	**8 %**
Fibre 1 g	
Sugars 22 g	
Protein 1 g	

Vitamin A	2 %	Vitamin C	0 %
Calcium	4 %	Iron	4 %

Answer

Product C is the Candy Bar and **Products A and B** are both Granola Bars. **Product B** however has more calories and fat than the actual Candy Bar.

Product A would be a better choice as it has about 40% less calories, almost half of the sugar of **Product B**, more B vitamins and 4.5 grams less fat than **Product B.**

For a Better Granola Bar Choice: Choose a Granola Bar with less than 3 grams of fat or less and at least 2 grams or more of fibre.

Sample Menu for Childcare Facilities

	Recommendations	Monday	Tuesday
Breakfast	**Serve 3 – 4 Food Groups** 0.5 Grain Products (GP) **0.5 – 1 Fruit & Vegetables(FV)** **0.5 Milk & Alternatives (MI)** **0 – 0.5 Meat & Alternatives (ME)**	**Cold Cereal** 15g = 0.5 GP **Milk** **½ cup = 0.5 MI** **Sliced Banana** ½ – 1 Banana = 0.5-1FV	**Cream of Wheat** 1/3 cup = 0.5GP **Milk** **½ cup = 0.5 MI** **Grapes, cut up** ¼ – ½ cup = 0.5-1FV
Morning Snack	**Serve: 1 – 2 Food Groups** 0.5 – 1 Grain Products (GP) 0.5 – 1 Fruit & Vegetables (FV)	**Apple** ½ – 1 Apple = 0.5-1FV **Whole Wheat Crackers** 3 – 6 crackers = 0.5-1GP **water**	**Orange Slices** ½ – 1 oranges = 0.1-1FV **Dry cereal mix** 15g – 30g = 0.5-1GP **water**
Main Meal	**Serve 3 – 4 Food Groups** 0.5 – 1 Grain Products (GP) 0.5 – 1 Fruit & Vegetables (FV) **0.5 Milk & Alternatives (MI)** **0 – 0.5 Meat & Alternatives (ME)**	**Veggie Noodle Soup*** 1/2 c soup = 1/4c FV = 0.5FV **Ham & Veggie Sandwich** **¼ – ½ sand =** 0.5-1GP **0.25 – 0.5ME** 0.25 – 0.5 FV **Milk** **½ cup = 0.5 MI** **water**	**Spaghetti** ¼ – ½ cup = 0.5-1GP **Meat Sauce** **¼ cup = 0.5ME** **Carrots / Celery** ¼ – ½ cup = 0.5-1FV **Milk** **½ cup = 0.5 MI** **water**
Afternoon Snack	**Serve 2 – 3 Food Groups** 0.5 Grain Products (GP) 0.5 – 1 Fruit & Vegetable(FV) **0 – 0.5 Milk & Alternatives(MI)**	**Milk** **½ cup = 0.5 MI** **Banana Muffin** ¼ large muffin = 0.5GP **Melon** ¼ – ½ cup = 0.5-1FV **water**	**Yogurt** **1/3 cup = 0.5MI** **Orange Juice** ¼ – ½ cup = 0.5-1FV **Oatmeal Muffin** ¼ lg muffin = 0.5GP **water**
Total Servings		Grain Products: 2 – 3 Fruit & Vegetables: 2 – 4 **Milk & Alternatives: 1.5** **Meat & Alternatives: 0.25 – 0.5**	Grain Products: 2 – 3 Fruit & Vegetables: 2 – 4 **Milk & Alternatives: 1.5** **Meat & Alternatives: 0.5**

Note: If no morning snack is provided redistribute the servings allocated to this time throughout the other meals

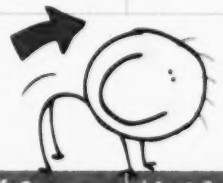
Wednesday	*Thursday*	*Friday*
Oatmeal Bannock with Jam ½ small = 0.5 GP **Milk** **½ cup = 0.5 MI** **Orange Slices** ½ – 1 orange = 0.5-1FV	**Oatmeal** 1/3c = 0.5 GP **Milk** **½ cup = 0.5 MI** **Sliced Banana** ½ – 1 Banana = 0.5-1FV	**Pancake** 1 sm = 0.5GP **Scrambled egg** **1 egg = 0.5ME** **Orange Slices** ½ – 1 orange = 0.5-1FV **Milk** **½ cup = 0.5MI**
Melon slices ¼ – ½ c = 0.5-1FV **Raisin toast** ½ – 1slice = 0.5-1GP **water**	**Orange Slices** ½ – 1 orange = 0.5-1FV **Whole Wheat Bagel** ¼ – ½ bagel = 0.5-1 GP **water**	**Apple** ½ – 1 apple = 0.5-1FV **Banana Bread** ½ – 1 slice = 0.1-1GP **water**
Turkey Stew **1 cup = 0.5ME** 1 FV **Small Whole Wheat Bun** ½ – 1 bun = 0.5-1 GP **Milk** **½ cup = 0.5MI** **water**	**Shepherds Pie*** **¾ cup = 1FV** **0.5 ME** **Small Whole Wheat Bun** ½ – 1 bun = 0.5-1 GP **Milk** **½ cup = 0.5 MI** **water**	**Vegetable Soup with Legumes** ½ c = 0.5FV **Oven Bannock** ½ – 1 sm = 0.5-1 GP **Milk** **½ cup = 0.5MI** **Broccoli** **¼ cup = 0.5FV** **water**
Rice Krispie Square 1 small = 0.5 GP **Milk** **½ cup = 0.5MI** **Applesauce** ¼ – ½ cup = 0.5-1FV **water**	**Blueberry Muffin** ¼ lg muffin = 0.5GP **Apple Juice** ¼ – ½ cup = 0.5-1FV **water**	**Yogurt** **1/3 cup = 0.5MI** **Kiwi Slices** ¼ – ½ cup = 0.5-1FV **Whole Wheat Crackers** 3 crackers = 0.5GP **water**
Grain Products: 2 – 3 Fruit & Vegetables: 2.5 – 4 **Milk & Alternatives: 1.5** **Meat & Alternatives: 0.5**	Grain Products: 2 – 3 Fruit & Vegetables: 2.5 – 4 **Milk & Alternatives: 1** **Meat & Alternatives: 0.5**	Grain Products: 2 – 3 Fruit & Vegetables: 2 – 4 **Milk & Alternatives: 1.5** **Meat & Alternatives: 0.5**

Menu Planning from the four food groups for Childcare Facilities

Sample Distribution of Servings in a Day for Children Ages 2 – 3

Meal/Snack	*Food Items*	*Grain Products*	*Vegetables & Fruit*	*Milk & Alternatives*	*Meat & Alternatives*
Breakfast		0.5	0.5	0.5	0.5
Morning Snack		0.5	0.5		
Lunch		0.5	0.5 – 1	0.5	
Snack		0.5	0.5 – 1		
Dinner		1	1	0.5 – 1	0.5
Snack			0.5	0.5 – 1	
Total number of servings		3	4	2	1
Recommended number of servings		3	4	2	1

Adapted from Capital Health/Caritas Group, Regional Nutrition and Food Service. Education Kit for Tots-Toddlers and Preschool.



Sample Distribution of Meals in a Day for Children Ages 4 – 5

Meal	*Food Item*	*Grain Products*	*Vegetables & Fruit*	*Milk & Alternatives*	*Meat & Alternatives*
Breakfast		0.5	1	0.5	
Morning snack		0.5	1		
Lunch		1	1	0.5	0.5
Snack		0.5	1	0.5	
Dinner		1	1	0.5	0.5
Snack		0.5			
Total number of servings		4	5	2	1
Recommended Number of servings		4	5	2	1

Adapted from Capital Health/Caritas Group, Regional Nutrition and Food Service. Education Kit for Tots-Toddlers and Preschool

Calculating Canada's Food Guide Servings From a Recipe

Shepherds Pie

Makes 10 – 3/4 cup servings

2 cups	mashed potatoes
1	onion, chopped
½ cup	broccoli, cut into flowerets
½ cup	green pepper, chopped
2 cups	carrots, chopped
¼ cups	tomato paste
2.5 cups	lean ground beef
2 tbsp.	oil
½ cup	water
½ tsp.	basil
1 cup	shredded cheese
1	bay leaf
	Paprika

Total Vegetables: 5 cups
Recipe yield: 10 servings
= 0.5 cups/serving
= 1 serving Vegetables & Fruit

Total Meat & Alternatives: 2.5 cups
Recipe yield: 10 servings
= 0.25 cups/serving
= ½ serving Meat & Alternatives

Total Milk & Alternatives: 1 cup
Recipe yield: 10 servings
= 0.1 cups/serving
= 0 serving Milk & Alternatives

Instructions:

1) Preheat oven to 350 degrees.
2) Saute onion in oil; add broccoli, pepper, carrots, basil and bay leaf. Stir well and add tomato paste and water; bring to boil.
3) Cover and simmer on low 15 minutes or until vegetables are tender.
4) Put vegetables and cooking liquid in 9 x 13 inch baking dish. Top with mashed potatoes, then cheese. Sprinkle with paprika for colour.
5) Bake 10 – 15 minutes or until potatoes are heated through.

Per ¾ cup serving of Shepherds Pie:
1 serving Vegetables & Fruit
0 servings Grain Products
1/2 serving Meat & Alternatives
0 servings Milk & Alternatives

Vegetable Noodle Soup

Makes 9 – ½ cup servings

4 cups	chicken or beef broth
½ cup	frozen broccoli
½ cup	sweet peas
¼ cup	niblet corn
½ cup	sliced carrots
½ cup	thin sliced celery
½ cup	noodles

Total Vegetables: 2.25 cups
Recipe yield: 9 servings
= 0.25 cups/serving
= ½ serving Vegetables & Fruit

Total Grain Products: 0.5 cups
Recipe yield: 9 servings
=0.05 cups per serving
= 0 serving Grain Products

Instructions:

1) In a large pan bring broth and water to a boil. Add frozen vegetables, carrots, and celery; cook one minute.
2) Add noodles; stir in boiling broth.
3) Reduce heat to low; simmer 5 minutes or until vegetables are tender-crisp. Serve.

Per ½ cup serving of Vegetable Noodle Soup:

½ serving Vegetables & Fruit

0 servings Grain Products

0 servings Meat & Alternatives

0 servings Milk & Alternatives

Additional Resources

The lists below are intended to provide examples of organizations that provide supplemental information in specific areas. These lists are not exhaustive. It is imperative that childcare providers base their practice on the most up to date and reliable information available.

Allergies

- Allergy Asthma Information Association, www.aaia.ca.
- Allergy Safe Communities, www.allergysafecommunities.ca
- Canadian School Boards Association, www.cdnsba.org. Anaphylaxis: A Handbook for School Boards, 2001.
- Anaphylaxis Canada, www.Safe4Kids.ca and www.anaphylaxis.org
- Calgary Allergy Network, www.cadvision.com/allergy
- Canadian Food Inspection Agency, www.inspection-gc.ca
- Canadian Society of Allergy and Immunology, csaci.medical.org
- Food Allergy and Anaphylaxis Network, www.foodallergy.org

Healthy Recipes

- *my amazing cook book*

  Alberta Health and Wellness
  www.healthyalberta.com

- *Better Food for Kids*

  Author: Joanne Saab, RD and Daina Kalnins, RD

  Publisher: Robert Rose Inc.

- *The Everything Kids Cookbook*

  Author: Sandra K. Nissenberg, MS, RD

  Publisher: Adams Media Corporation

- *The Healthy Start Kids Cookbook*

  Author: Sandra K. Nissenberg, MS. RD

  Publisher: John Wiley and Sons, Inc.

- *Canada's Best Cookbook for Kids with Diabetes*

  Authors: Colleen Bartley and Doreen Yasui, RD, CDE published in cooperation with the Canadian Diabetes Association

  Publisher: Robert Rose Inc.

- *First Nations Healthy Choice Recipes*

  Publisher: Chinook Health Region and The Southern Alberta Aboriginal Diabetes Coalition

- *Kids Health – Recipes for Kids*

  Includes vegetarian options, and recipes for kids with cystic fibrosis, diabetes, lactose intolerance, celiac disease.

  Recipes reviewed by: Allison Brinkley, RD, LD/N, CNSD www.kidshealth.org

- *Dietitians of Canada – Simply Great Food : 250 quick, easy and delicious recipes*

  Authors: Patricia Cheuy, MSc, RD, Eileen Campbell and Mary Sue Waisman, MSc, RD

  Publisher: Robert Rose Inc.

  Selected recipes available at: www.dietitians.ca

- *Dietitians of Canada – Cook Great Food*

  Author: Dietitians of Canada

  Selected recipes available at: www.dietitians.ca

- *Dietitians of Canada – Great Food Fast:*

  Authors: Bev Callaghan, RD and Lynn Roblin, RD

  Publisher: Robert Rose Inc.

  Selected recipes available at: www.dietitians.ca

Label Reading

- Health Canada: Nutrition Labelling www.healthcanada.ca/nutrition
- Health Canada: Nutrition Labelling...Get the Facts! www.hc-sc.gc.ca
- Health Canada: Nutrition Labelling... Get the Facts! (First Nations and Inuit Focus) www.hc-sc.gc.ca
- Health Canada: Nutrition Labelling Toolkit for Educators (Ready to go presentation): www.hc-sc.gc.ca
- Health Canada: It's Your Health-Nutrition Labelling www.hc-sc.gc
- Health Canada: Food and Nutrition – Consumer Resources: www.hc-sc.gc
- Health Canada: Food and Nutrition- Ready-to-use-articles: sharing the nutrition facts: www.hc-sc.gc.ca
- Canadian Health Network: Does it belong in your grocery cart? The new food labels can help: www.canadian-health-network.ca
- Canadian Diabetes Association and Dietitians of Canada: Healthy eating is in store for you www.healthyeatingisinstore.ca
- Kellogg's Canada: Reading Food Labels www.kelloggs.ca

APPENDIX D: FREQUENTLY ASKED QUESTIONS

Should I serve fresh, frozen, or canned vegetables and fruits?

- Frozen and canned vegetables and fruit are healthy and convenient options.
- Frozen:
  - Some frozen vegetables have added spices and sauces. These may be higher in salt and fat. Check and compare the Nutrition Facts table on the package.
  - Choose frozen fruit that is unsweetened.
- Canned:
  - Canned vegetables usually contain added salt. To lower the salt content, these items can be rinsed and drained.
  - Canned fruit packed in 'fruit juice' contains less added sugar than fruit packed in 'syrup'.
- Purchasing local produce and fresh produce in-season can reduce costs of serving vegetables and fruits.

Is bottled water better than tap water?

- Water is one of the best fluids to consume (and one of the cheapest).
- Some of the bottled water that is sold on the market may actually be tap water. Read the label. Through the distillation process for bottled water however, some nutrients may have been removed.
- Bottled water and tap water are both safe to drink if they meet the standards set for them. There is no assurance that water from the bottle is any safer than water from the tap.

Should I serve butter or margarine?

- Butter and margarine contain the same amount of calories and fat.
- If you choose to serve margarine, use only non-hydrogenated margarine.
- Both butter and margarine should be used sparingly.

What are healthy fat choices?

- Calorie wise all fats are equal. One teaspoon of fat equals 4 grams and each gram is worth 9 calories. Trans fats (manufactured fats /hydrogenated vegetable oils) cause bad cholesterol to increase in your blood and healthy cholesterol to decrease. Saturated fats (mostly from animal sources) also increase bad cholesterol in your blood. "Mono" and "poly" unsaturated fats are healthy fats. These fats do not increase bad fat in your blood. Good examples of these fats are oils from plants, nuts and seeds.

Is chocolate milk a healthy choice?

- Chocolate milk and white milk contain the same nutrients. The only difference is that chocolate milk is higher in sugar.
- White milk should be served regularly.

Are sports drinks a good option?

- Sports drinks, like fruit drinks and regular pop, are high in sugar and offer little or no nutrients.
- Sports drinks are specifically designed for glucose, fluid, and electrolyte replacement for endurance sports activities where excessive sweat loss occurs.

Are healthy meals more expensive?

- You can eat healthy food and save money. The following tips will help you save money **and** enjoy all the benefits that healthy foods offer.

1. Plan your organization's food needs

   Write out a grocery list for the coming days or weeks. If you have all the items you need on hand, there will be no last minute menu changes, or extra shopping trips (which can cost time and money).

2. Use Canada's Food Guide

   Your menu plan should be based on Canada's Food Guide to ensure well-balanced eating patterns.

3. Convenience costs

   It always costs you money to have someone else do the extra steps. For example:

   — Chicken pieces compared to whole chicken: Compare the price per kg for a whole chicken with the price per kg of pre-cut chicken pieces.

   — Shredded cheese compared to a block of cheese: Do a price comparison per 100g (some stores do this for you). Buying shredded cheese means you are paying someone else to do the shredding for you.

   — Ready-to-drink orange juice compared to frozen orange juice concentrate: Again, you are paying someone else to add the water for you.

4. Buy in bulk

   Warehouse packs and larger packages or containers are often cheaper on a 'per kg' or 'per gram' basis.

5. Compare

   Compare the price of different brands. Compare the ingredient lists. Often, the only difference is price.

6. Look for specials or sales on food items.

Grocery cart price-comparison

Grocery cart #1 has more food than grocery cart #2. A few careful choices can easily allow for healthier food selection and save money.

Nutritious Grocery Cart		*Less Nutritious Grocery Cart*	
Grocery Cart #1	**Cost**	**Grocery Cart #2**	**Cost**
Frozen orange juice – 355ml	$1.39	Orange crystals – 425 g	$1.89
Banana – 1	$0.30	Fruit roll-up – 130 grams	$3.69
Apple – 1	$0.69		
Ingredients for home-made chicken pie			
Chicken – 454 g	$1.99	Frozen chicken pies	
Potatoes – 1 kg	$1.05	(4 x 200 grams)	$4.59
Carrots – 1 kg	$1.15		
Onions – 250 g	$0.51		
Frozen peas – 500 g	$1.99		
Deli sliced ham – 200 g	$1.94	Pre-packaged sliced ham – 200g	$2.60
Total cost	$11.01	Total cost	$12.77

Meals and snack price-comparison

Breakfast #1 contains more food choices from Canada's Food Guide than breakfast #2.

Nutritious Meal Plan		*Less Nutritious Meal Plan*	
Breakfast #1	**Cost**	**Breakfast #2**	**Cost**
½ cup milk	$0.10	½ cup sweetened beverage	$0.12
⅓ cup unsweetened whole grain cereal	$0.14	1 piece white toast with jam	$0.10
½ banana	$0.15	½ apple	$0.25
Snack #1		**Snack #2**	
½ orange	$0.22	Fruit snack	$0.27
Lunch #1		**Lunch #2**	
½ cup milk	$0.10	½ cup sweetened beverage	$0.12
½ cup chicken vegetable soup	$0.10	¼ cup macaroni dinner	$0.07
½ whole wheat bannock bread	$0.06	½ weiner	$0.09
¼ cup unsweetened applesauce	$0.16	¼ cup instant pudding	$0.14
Total cost	$1.03	Total cost	$1.16

APPENDIX E: REFERENCES

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Appendix A

1. Section V: Nutrition Labelling — Section 5.6.3 Reference for "Fat-Free" claims; Serving Sizes for Foods for Nutrient Content Claims; and Nutrition Labeling (Health Canada 1997) (Section 5.6.3) (Amended 10/06/97) —

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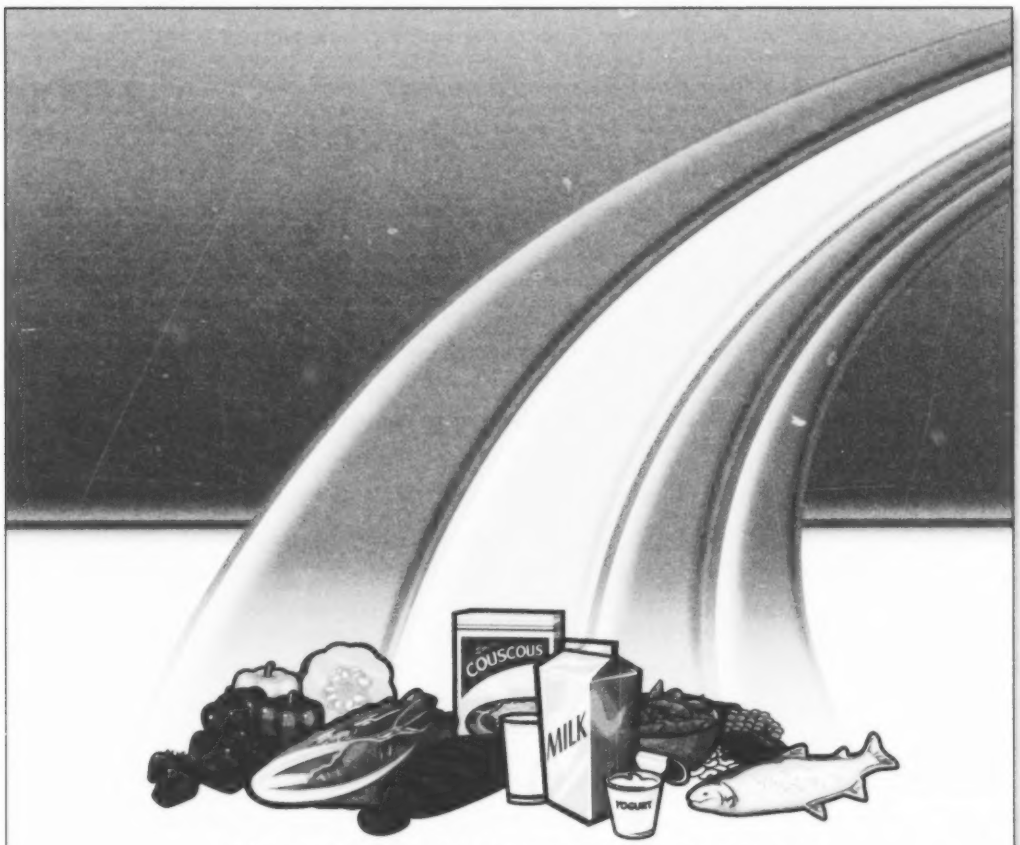
Appendix C

1. Adapted with permission from *Fats and Your Health* — Calgary Health Region.

2. Adapted with permission from *What's in the Food You're Serving?* — Chinook Health Region.

APPENDIX F: EATING WELL WITH CANADA'S FOOD GUIDE



VISIT CANADA'S FOOD GUIDE ONLINE

www.healthcanada.gc.ca/foodguide

- *Practical tips to help follow Canada's Food Guide*
- *Interactive tools and resources*
- *Scientific background*

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